

What is claimed is:

1 1. A reactor for microarray, comprising:
2 a first member comprising a fillister for a sample
3 solution,
4 a second member disposed on the first member, and
5 at last two electrodes disposed on the second member to
6 contact the sample solution.

1 2. The reactor for microarray as claimed in claim 1,
2 wherein the first and the second members are composed of
3 organic or inorganic materials.

1 3. The reactor for microarray as claimed in claim 2,
2 wherein the organic materials comprises resin, synthetic
3 resin, or synthetic polymer, wherein said synthetic polymer
4 comprises polyethylene, polystyrene, polypropylene, or
5 polyvinyl chloride.

1 4. The reactor for microarray as claimed in claim 2,
2 wherein the inorganic materials comprises metal, ceramic,
3 silicon, or glass.

1 5. The reactor for microarray as claimed in claim 1,
2 wherein the second member further comprises a plurality of
3 pores.

1 6. The reactor for microarray as claimed in claim 1,
2 wherein the sample solution comprises a molecule.

1 7. The reactor for microarray as claimed in claim 6,
2 wherein said molecule is an organic molecule, an inorganic
3 molecule or a biological molecule.

1 8. The reactor for microarray as claimed in claim 7,
2 wherein said biological molecule comprises nucleic acid,
3 oligonucleotide, protein or peptide.

1 9. The reactor for microarray as claimed in claim 1,
2 further comprising a second pair of electrodes disposed on
3 the second member.

1 10. The reactor for microarray as claimed in claim 1,
2 further comprising one electrode corresponding to the pair
3 of electrodes on the second member.

1 11. The reactor for microarray as claimed in claim 1,
2 9, or 10, wherein two or more electrodes are used to
3 generate one or more electrical fields.

1 12. The reactor for microarray as claimed in claim 1,
2 9, or 10, wherein the electrodes are composed of Au, Ag, Cu,
3 Ni, Pt, or stainless steel.

1 13. The reactor for microarray as claimed in claim 1,
2 9, 10, wherein the first member, the second member, and the
3 electrodes are inert to the sample solution.

1 14. The reactor for microarray as claimed in claim 1,
2 wherein the second member further embeds a microarray.

1 15. The reactor for microarray as claimed in claim 1,
2 wherein the first and the second members are formed
3 integrally.

1 16. A reactor for microarray, comprising:
2 a first member comprising a first fillister for a
3 microarray containing a reaction region;
4 a second member removably disposed on the first member
5 with a second fillister corresponding to the
6 reaction region; and
7 at last two electrodes disposed on the second
8 fillister.

1 17. The reactor for microarray as claimed in claim 16,
2 wherein the first and the second members are composed of
3 organic or inorganic materials.

1 18. The reactor for microarray as claimed in claim 17,
2 wherein said organic material comprises resin, synthetic
3 resin, or synthetic polymer, wherein said synthetic polymer
4 comprises polyethylene, polystyrene, polypropylene, or
5 polyvinyl chloride.

1 19. The reactor for microarray as claimed in claim 17,
2 wherein said inorganic material comprises metal, ceramics,
3 silicon, or glass.

1 20. The reactor for microarray as claimed in claim 16,
2 wherein the second member further comprises a plurality of
3 pores.

1 21. The reactor for microarray as claimed in claim 16,
2 further comprising a second pair of electrodes disposed on
3 the second member.

1 22. The reactor for microarray as claimed in claim 16,
2 further comprising one electrode corresponding to the pair
3 of electrodes on the second member.

1 23. The reactor for microarray as claimed in claim 16,
2 25, or 26, wherein two or more electrodes are used in
3 combination to generate one or more electrical fields.

1 24. The reactor for microarray as claimed in claim 16,
2 25, or 26, wherein the electrodes are Au, Ag, Cu, Ni, Pt, or
3 stainless steel.